

66602-B.ST25  
SEQUENCE LISTING



<110> ITESCU, SILVIU  
<120> REGENERATION OF ENDOGENOUS MYOCARDIAL TISSUE  
<130> 0575/66602B  
<140> 10/693,480  
<141> 2003-10-23  
<150> 10/128,738  
<151> 2002-04-23  
<160> 11  
<170> PatentIn version 3.3  
<210> 1  
<211> 2780  
<212> DNA  
<213> HOMO SAPIENS  
<400> 1  
aaactaacc cttcttttct ccaaaggagt gcttgtggag atcggatctt ttctccagca 60  
attgggggaa agaaggcttt ttctctgact tcgcttagtg taaccagcgg cgtatatattt 120  
ttaggcgcct ttctgaaaac ctagtagtta atattcattt gtttaaattt tattttattt 180  
ttaagctcaa actgcttaag aataccttaa ttccttaaag tgaaataatt ttttgcaaag 240  
gggtttcctc gatttgagc ttttttttcc ttccaccgtc atttctaact cttaaaacca 300  
actcagttcc atcatggtga tggtcaagaa gatcaagtct ttgaggtgg tctttaacga 360  
ccctgaaaag gtgtacggca gtggcgagaa ggtggctggc cgggtgatag tggaggtgtg 420  
tgaagttact cgtgtcaaag ccgttaggat cctggcttgc ggagtggcta aagtgccttg 480  
gatgcaggga tcccagcagt gcaaacagac ttcggagtac ctgcgctatg aagacacgct 540  
tcttctggaa gaccagccaa caggtgagaa tgagatggtg atcatgagac ctggaaacaa 600  
atatgagtac aagttcggct ttgagcttcc tcaggggcct ctgggaacat ctttcaaagg 660  
aaaatatggg tgtgtagact actgggtgaa ggcttttctt gaccgcccga gccagccaac 720  
tcaagagaca aagaaaaact ttgaagtagt ggatctggtg gatgtcaata ccctgatatt 780  
aatggcacct gtgtctgcta aaaaagaaaa gaaagtttcc tgcatgttca ttcctgatgg 840  
gcggggtgtc gtctctgctc gaattgacag aaaaggattc tgtgaagggtg atgagatttc 900  
catccatgct gactttgaga atacatgttc ccgaattgtg gtccccaag ctgccattgt 960  
ggcccgccac acttaccttg ccaatggcca gaccaagggtg ctgactcaga agttgtcatc 1020  
agtcagaggc aatcatatta tctcagggac atgcgcatca tggcgtggca agagccttcg 1080  
ggttcagaag atcaggcctt ctatcctggg ctgcaacatc cttcgagttg aatattcctt 1140  
actgatctat gttagcgttc ctggatccaa gaaggatcatc cttgacctgc ccctggtaat 1200  
tggcagcaga tcaggcttaa gcagcagaac atccagcatg gccagccgaa ccagctctga 1260  
gatgagttgg gtagatctga acatccctga taccacagaa gctcctccct gctatatgga 1320

## 66602-B.ST25

```

tgtcattcct gaagatcacc gattggagag cccaaccact cctctgctag atgacatgga 1380
tggctctcaa gacagcccta tctttatgta tgcccctgag ttcaagttca tgccaccacc 1440
gacttatact gaggtggatc cctgcatcct caacaacaat gtgcagtgag catgtggaag 1500
aaaagaagca gctttaccta cttgtttctt tttgtctctc ttcctggaca ctcacttttt 1560
cagagactca acagtctctg caatggagtg tgggtccacc ttagcctctg acttcctaata 1620
gtaggaggtg gtcagcaggc aatctcctgg gccttaaagg atgcggactc atcctcagcc 1680
agcgcccatg ttgtgataca ggggtgtttg ttggatgggt ttaaaaataa ctagaaaaac 1740
tcaggcccat ccattttctc agatctcctt gaaaattgag gccttttcga tagtttcggg 1800
tcaggtaaaa atggcctcct ggcgtaagct tttcaagggt ttttgagggc tttttgtaaa 1860
ttgtgatagg aactttggac cttgaactta cgtatcatgt ggagaagagc caatttaaca 1920
aactaggaag atgaaaaggg aaattgtggc caaaactttg ggaaaaggag gttcttaaaa 1980
tcagtgtttc ccctttgtgc acttgtagaa aaaaaagaaa aaccttctag agctgatttg 2040
atggacaatg gagagagctt tccctgtgat tataaaaaag gaagctagct gctctacggt 2100
catctttgct taagagtata ctttaacctg gcttttaaaag cagtagtaac tgccccacca 2160
aaggctctta aagccatttt tggagcctat tgcactgtgt tctcctactg caaatatttt 2220
catatgggag gatggttttc tcttcatgta agtccttgga attgattcta aggtgatgtt 2280
cttagcactt taattcctgt caaatttttt gttctcccct tctgccatct taaatgtaag 2340
ctgaaactgg tctactgtgt ctctaggggt aagccaaaag acaaaaaaaaaa ttttactact 2400
tttgagattg cccaatgta cagaattata taattctaac gcttaaatca tgtgaaaggg 2460
ttgctgctgt cagccttgcc cactgtgact tcaaacccaa ggaggaactc ttgatcaaga 2520
tgccaacccc tgtgatcaga acctccaaat actgccatga gaaactagag ggcaggctct 2580
cataaaagcc ctttgaaccc cttcctgcc ctgtgttagg agatagggat attggcccct 2640
cactgcagct gccagcactt ggtcagtcac tctcagccat agcactttgt tctactgtcct 2700
gtgtcagagc actgagctcc acccttttct gagagttatt acagccagaa agtgtgggct 2760
gaagatgggt ggtttcatgt 2780

```

```

<210> 2
<211> 391
<212> PRT
<213> HOMO SAPIENS

```

```

<400> 2

```

```

Met Val Met Phe Lys Lys Ile Lys Ser Phe Glu Val Val Phe Asn Asp
1           5           10          15

```

```

Pro Glu Lys Val Tyr Gly Ser Gly Glu Lys Val Ala Gly Arg Val Ile
20          25          30

```

## 66602-B.ST25

val Glu val Cys Glu val Thr Arg val Lys Ala val Arg Ile Leu Ala  
 35 40 45

Cys Gly val Ala Lys val Leu Trp Met Gln Gly Ser Gln Gln Cys Lys  
 50 55 60

Gln Thr Ser Glu Tyr Leu Arg Tyr Glu Asp Thr Leu Leu Leu Glu Asp  
 65 70 75 80

Gln Pro Thr Gly Glu Asn Glu Met val Ile Met Arg Pro Gly Asn Lys  
 85 90 95

Tyr Glu Tyr Lys Phe Gly Phe Glu Leu Pro Gln Gly Pro Leu Gly Thr  
 100 105 110

Ser Phe Lys Gly Lys Tyr Gly Cys val Asp Tyr Trp val Lys Ala Phe  
 115 120 125

Leu Asp Arg Pro Ser Gln Pro Thr Gln Glu Thr Lys Lys Asn Phe Glu  
 130 135 140

val val Asp Leu val Asp val Asn Thr Pro Asp Leu Met Ala Pro val  
 145 150 155 160

Ser Ala Lys Lys Glu Lys Lys val Ser Cys Met Phe Ile Pro Asp Gly  
 165 170 175

Arg val Ser val Ser Ala Arg Ile Asp Arg Lys Gly Phe Cys Glu Gly  
 180 185 190

Asp Glu Ile Ser Ile His Ala Asp Phe Glu Asn Thr Cys Ser Arg Ile  
 195 200 205

val val Pro Lys Ala Ala Ile val Ala Arg His Thr Tyr Leu Ala Asn  
 210 215 220

Gly Gln Thr Lys val Leu Thr Gln Lys Leu Ser Ser val Arg Gly Asn  
 225 230 235 240

His Ile Ile Ser Gly Thr Cys Ala Ser Trp Arg Gly Lys Ser Leu Arg  
 245 250 255

val Gln Lys Ile Arg Pro Ser Ile Leu Gly Cys Asn Ile Leu Arg val  
 260 265 270

Glu Tyr Ser Leu Leu Ile Tyr val Ser val Pro Gly Ser Lys Lys val  
 275 280 285

Ile Leu Asp Leu Pro Leu val Ile Gly Ser Arg Ser Gly Leu Ser Ser  
 290 295 300

## 66602-B.ST25

Arg Thr Ser Ser Met Ala Ser Arg Thr Ser Ser Glu Met Ser Trp Val  
305 310 315 320

Asp Leu Asn Ile Pro Asp Thr Pro Glu Ala Pro Pro Cys Tyr Met Asp  
325 330 335

Val Ile Pro Glu Asp His Arg Leu Glu Ser Pro Thr Thr Pro Leu Leu  
340 345 350

Asp Asp Met Asp Gly Ser Gln Asp Ser Pro Ile Phe Met Tyr Ala Pro  
355 360 365

Glu Phe Lys Phe Met Pro Pro Pro Thr Tyr Thr Glu Val Asp Pro Cys  
370 375 380

Ile Leu Asn Asn Asn Val Gln  
385 390

<210> 3  
<211> 1176  
<212> DNA  
<213> HOMO SAPIENS

<400> 3  
atggtgatgt tcaagaagat caagtctttt gaggtggtct ttaacgaccc tgaaaagggtg 60  
tacggcagtg gcgagaaggt ggctggccgg gtgatagtgg aggtgtgtga agttactcgt 120  
gtcaaagccg ttaggatacct ggcttgccga gtggctaaag tgctttggat gcagggatcc 180  
cagcagtgca aacagacttc ggagtacctg cgctatgaag acacgcttct tctggaagac 240  
cagccaacag gtgagaatga gatggtgatc atgagacctg gaaacaaata tgagtacaag 300  
ttcggctttg agcttcctca ggggcctctg ggaacatcct tcaaaggaaa atatgggtgt 360  
gtagactact ggggtgaaggc ttttcttgac cgcccgagcc agccaactca agagacaaag 420  
aaaaactttg aagtagtgga tctggtggat gtcaataccc ctgatttaat ggcacctgtg 480  
tctgctaaaa aagaaaagaa agtttcctgc atgttcattc ctgatgggcg ggtgtctgtc 540  
tctgctcgaa ttgacagaaa aggattctgt gaaggatgat agatttccat ccatgctgac 600  
tttgagaata catgttcccc aattgtggtc cccaaagctg ccattgtggc ccgccacact 660  
taccttgcca atggccagac caaggtgctg actcagaagt tgtcatcagt cagaggcaat 720  
catattatct cagggacatg cgcatactgg cgtggcaaga gccttcgggt tcagaagatc 780  
aggccttcta tcctgggctg caacatcctt cgagttgaat attccttact gatctatgtt 840  
agcgttcctg gatccaagaa ggtcatcctt gacctgcccc tggttaattgg cagcagatca 900  
ggtctaagca gcagaacatc cagcatggcc agccgaacca gctctgagat gagttgggta 960  
gatctgaaca tccctgatac cccagaagct cctccctgct atatggatgt cattcctgaa 1020  
gatcaccgat tggagagccc aaccactcct ctgctagatg acatggatgg ctctcaagac 1080

66602-B.ST25

agccctatct ttatgtatgc ccctgagttc aagttcatgc caccaccgac ttatactgag 1140  
gtggatccct gcatcctcaa caacaatgtg cagtga 1176

<210> 4  
<211> 20  
<212> DNA  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> PRIMER DIRECTED TO RAT Cinc

<400> 4  
gaagatagat tgcaccgatg 20

<210> 5  
<211> 18  
<212> DNA  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> PRIMER DIRECTED TO RAT Cinc

<400> 5  
catagcctct cacatttc 18

<210> 6  
<211> 25  
<212> DNA  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> PRIMER DIRECTED TO RAT Cinc

<400> 6  
gcgcccgtcc gccaatgagc tgcgc 25

<210> 7  
<211> 28  
<212> DNA  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> PRIMER DIRECTED TO RAT Cinc

<400> 7  
cttggggaca cccttcagca tcttttgg 28

<210> 8  
<211> 21  
<212> DNA  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> PRIMER DIRECTED TO RAT Cinc

<400> 8  
ctctaccac ggcaagttca a 21

<210> 9  
<211> 20

66602-B.ST25

<212> DNA  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> PRIMER DIRECTED TO RAT Cinc

<400> 9  
gggatgacct tgcccacagc

20

<210> 10  
<211> 34  
<212> DNA  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> PRIMER DIRECTED TO RAT HBP23

<400> 10  
tttaccctct tgactttact tttgtgtgtc ccac

34

<210> 11  
<211> 23  
<212> DNA  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> PRIMER DIRECTED TO RAT HBP23

<400> 11  
ccagctgggc acacttcacc atg

23